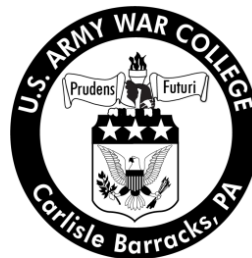


Strategy Research Project

Enabling Unity of Effort in Response Activities During Complex Catastrophes

by

Lieutenant Colonel Monte S. Harner
United States Air Force



United States Army War College
Class of 2013

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United States Air Force

Colonel Thomas P. Reilly
Department of Military Strategy, Planning, and Operations
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U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

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Unity of effort is a fundamental principle almost any complex activity that seeks to focus diverse personnel and resources toward a common goal. In the realm of disaster response, achieving unity of effort is paramount as orchestrating a rapid response directly translates into saved lives. However, achieving unity of effort while in the midst of the chaos created in the aftermath of a complex catastrophe will undoubtedly be extremely difficult. This thesis considers command and control constructs that support a whole of community approach to achieving unity of effort in complex catastrophe response. In that vein, organization and preparedness at all levels (local, state and federal) is critical in order to facilitate an integrated, multi-sector response. The National Response Framework provides an effective structure that can facilitate effective unity of effort, however the Framework is silent on coordinating military support. Innovative joint command and control concepts as the Dual-Status Commander and a USNORTHCOM Joint Interagency Task Force will enhance efficiency in relief and recovery operations, and will ultimately protect and restore the nation's people, infrastructure, property and environment.

Enabling Unity of Effort in Response Activities During Complex Catastrophes

By failing to prepare you are preparing to fail.

—Benjamin Franklin¹

Unity of effort is a fundamental principle not only in military planning and execution, but also in government, business, and most any complex activity that seeks to focus diverse personnel and resources toward a common goal. In the realm of disaster response, achieving unity of effort is paramount as orchestrating an organized and efficient response directly translates to delivering aid to people in need in the shortest time possible, and, “Time equals lives saved.”² Indeed, the National Response Framework (NRF) confirms, “Success requires unity of effort...”³

Joint Publication 1 defines unity of effort as, “Coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization...”⁴ Simple in concept, successfully achieving this principle can be difficult, especially in large, diverse organizations. In recovering from a disaster event, it is necessary to direct and coordinate the efforts of numerous agencies, at all levels (federal, state, and local), both public and private. This poses a significant challenge as the priorities and goals for each agency and stakeholder will not likely align.

Since the occurrences of 9/11 and Katrina have revealed dysfunctionalities in our nation’s response system, numerous authors have researched the issue specific to unity of effort and have offered recommendations with respect to improving command and control, doctrine, planning, joint training and exercises, etc. All provide value to furthering the state of knowledge and understanding on the topic. However, few have

addressed the concept in the context of a complex catastrophe. In his research, this author found only one author, Caroline Ross Prosch, who in a 2011 Naval Post Graduate School Thesis, provided some significant discussion on the topic.⁵ It is within this knowledge gap, and the peculiar realities and challenges associated with a complex catastrophe, where this author will focus this thesis.

It is said that Katrina was the most destructive natural disaster that this country has ever experienced. Impacting 93,000 square miles, “Hurricane Katrina caused over \$96 billion in property damage, destroyed an estimated 300,000 homes, produced 118 million cubic yards of debris, displaced 770,000 people, and killed an estimated 1,330 people.”⁶ As horrific as was the impact of that storm, it is relatively minor compared to the level of widespread devastation anticipated as a result of a complex catastrophe. By comparison, the New Madrid earthquake scenario, as considered in a May 2011 National Level Exercise, damaged 715,000 buildings and displaced 7.2 million people across an eight-state region.⁷

The premise of this work is to consider command and control constructs that support a whole of community approach to achieving unity of effort in complex catastrophe response. In that vein, organization and preparedness is critical in order to shape the environment to facilitate an integrated multi-sector response within the chaos created by the disaster. This paper addresses response responsibilities across federal, state, and local lines at a strategic level. Unity of effort is achieved by (1) an understanding by each party as to their roles and responsibilities, and (2) a command and control structure that can function in austere conditions, objectively determine

priorities, and mobilize and deliver recovery resources across the entire impacted region.

Authorities

To understand the scope of roles and responsibilities at each level, a brief review of U.S. statutory and policy authorities and limitations is necessary. This review is not intended to be exhaustive as other authors have previously provided outstanding summaries of applicable law and government directives. In particular, the reader is directed to the work of Joseph Austin (U.S. Army War College Strategy Research Project)⁸ and Alice Buchalter (Library of Congress Report)⁹ for exceptional synopses of major Defense Support of Civil Authorities (DCSA)-related statutes, relevant executive branch documents, and applicable Department of Defense (DoD) directives and regulations. Additionally, Colonel John T. Gereski provides a thorough review of U.S.C. Title 10 and Title 32 authorizations and limitations with respect to federal and state forces pertaining specifically to the application of the relatively new dual-status commander (DSC) construct.¹⁰

As pointed out by the Advisory Panel on DoD Capabilities for Support of Civil Authorities after Certain Incidents, “There is ample statutory authority, directives, and other policy for a wide variety of DoD support activities initiated at the request of the Department of Homeland Security and Justice and other Federal agencies, and at the direction of the president.”¹¹ However, for the purpose of this paper, the author will only provide the reader with an orientation of the most significant applicable legislation: the U.S. Constitution, the Posse Comitatus Act, the Insurrection Act, and the Stafford Act.

Perhaps the most efficient means to achieve unity of effort would be to consolidate all forces under a single commander; thereby attaining unity of command.

The concept of unity of command permeates US military joint doctrine as a fundamental principle of war and is “central to unity of effort.”¹² Additionally, other nations, with respect to disaster response, have adopted a single chain of command structure to direct and manage all aspects of disaster relief and recovery operations. For instance, “The Israeli civil defense is founded in one command and control structure, the Home Front Command within the [Israeli Defense Force].”¹³ However, such a streamlined structure is not possible under our federalist system of government, where respective authorities are divided between federal, state and local jurisdictions. The most significant division has its origins in the U.S. Constitution which, as a result of the separation of powers, places command and control of federal military forces under the president while enabling state militias (e.g., National Guard forces) to remain under the control of their respective state governors, unless federally activated.¹⁴ These distinctions have generated differences in authorities between the particular statuses of federal and state military personnel.

Federal military forces authorities (both active duty and reserve components) are empowered under Title 10 of the U.S.C. Alternatively, National Guard force authorities are stipulated under Title 32 (or Title 10, when federalized). As a result, National Guard personnel may serve in four different capacities: inactive (traditional part-time role, state controlled and funded), state active duty (full time, state controlled and funded), Title 32 active duty (full time, state controlled, federally funded), and Title 10 active duty (full time, federally controlled and funded). Figure 1 below depicts the command and control relationship for state active duty, Title 32 and Title 10 military forces.

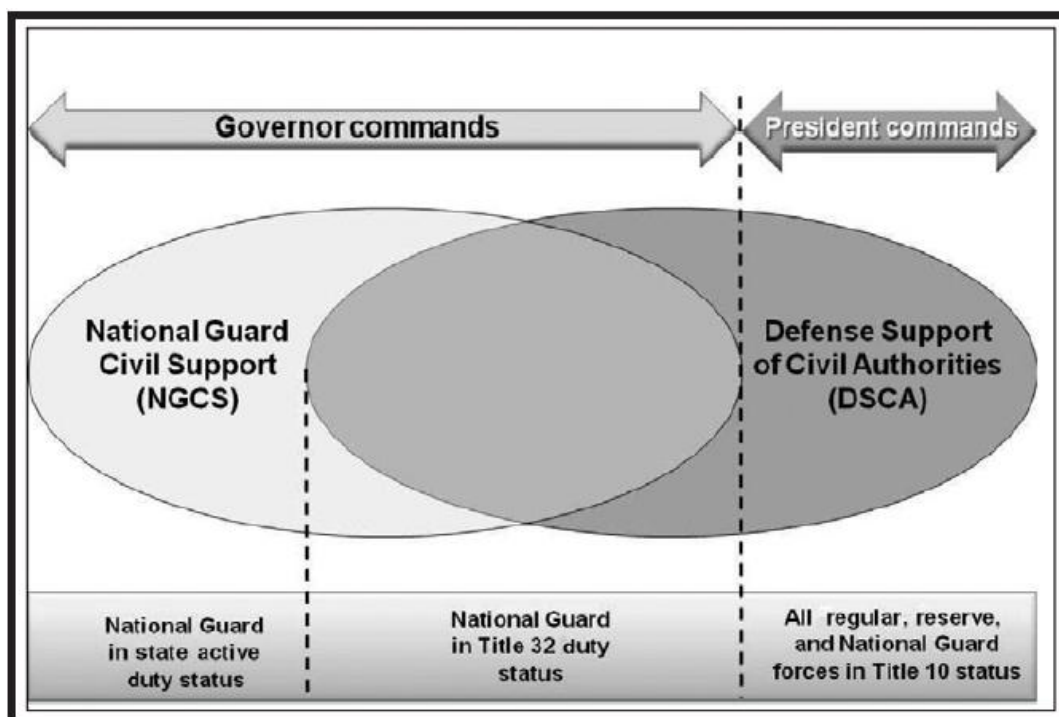


Figure 1. Command and Control Relationship U.S. Military Forces¹⁵

The distinction as to the status (e.g., Title 10 vs. Title 32) of the military member is especially important in relation to the Posse Comitatus Act. This Act prohibits the use of federal military personnel (Title 10) to perform law enforcement activities inside the U.S., except as authorized by the Constitution or by an act of Congress. As a result, if Title 10 forces (including National Guard placed on Title 10 status) are deployed in support of disaster relief operations, they may not participate in activities to enforce state laws, control traffic, investigate civil crime, or arrest citizens. According to a Report to Congress, Jennifer K. Elsea wrote:

...the courts have held that, absent a recognized exception, the Posse Comitatus Act is violated, (1) when civilian law enforcement officials make “direct active use” of military investigators; or (2) when the use of the military “pervades the activities” of the civilian officials; or (3) when the military is used so as to subject citizens to the exercise of military power that is “regulatory, prescriptive, or compulsory in nature.”¹⁶

An exception to this restriction is enabled by the Insurrection Act which is summarized below. It is also important to clarify that National Guardsmen in state active duty or Title 32 status do not have this restriction. As long as the Guardsmen remain under control of the governor, they are permitted to support law enforcement operations. This distinction is important. During a widespread disaster event, if the president chooses to federalize the National Guard of impacted states, that is, place them on Title 10 status, in order to unify and mass federal efforts for relief activities, he will not only infringe on state sovereignty, but also largely eliminate the state governors' ability to utilize their organic Guardsmen to conduct emergency response operations or to augment their police forces to maintain law and order. As an example, a potential Posse Comitatus violation was identified during relief operations post-Katrina when elements of the 82nd Airborne (Title 10 assets) were utilized to patrol the streets of New Orleans. Though the military claimed that their purpose was to merely show presence, it did have the effect of suppressing looting and other criminal behavior and thus may have violated the Act.¹⁷

As noted above, invoking the Insurrection Act provides one with a means of allowing the federal military to perform law enforcement functions. Under the Act, there are three circumstances specified where which the president may utilize this tool: (1) the state legislature or the governor expressly requests such support to suppress an insurrection, (2) when unlawful activities within a state have made it "impracticable to enforce the laws of the United States", or (3) a state is unable or unwilling to prevent its citizens from being "deprived of a right, privilege, immunity, or protection named in the Constitution and secured by law"¹⁸ After Katrina, as part of the 2007 Defense

Authorization Act, the authorities granted to the president within the Act were broadened beyond insurrection by enabling the deployment of federal troops to enforce the laws during a “natural disaster, epidemic or other serious public health emergency, terrorist attack or incident, or other condition...when the President determines that...the authorities of the State or possession are incapable of maintaining public order”.¹⁹ However, these changes were fully repealed in the 2008 Defense Authorization Act.²⁰

In practice, the invocation of the Insurrection Act is very rare. Indeed, the last time the Act was invoked was in 1992, when at the request of the governor of California, President George H.W. Bush dispatched federal troops to assist the California National Guard in quelling the Los Angeles Rodney King riots. Additionally, since the Civil War, the Act has only been invoked without the request of a state’s government to enforce school desegregation in the South in the 1950s and 1960s.²¹ More recently, when Louisiana Governor Kathleen Blanco refused federal support during Katrina’s immediate aftermath, President George W. Bush considered employing the Act to push forward federal support despite the governor’s resistance. In recounting the event, he stated:

If I invoked the Insurrection Act against her [Governor Blanco] wishes, the world would see a male Republican president usurping the authority of a female Democratic governor by declaring an insurrection in a largely African American city. That would arouse controversy anywhere. To do so in the Deep South, where there had been centuries of states’ rights tension, could unleash holy hell.²²

Sean McGrane suggested in an article published in the Michigan Law Review that President Bush’s resistance to invoking the Act was largely due to government federalism concerns.²³ This author would also propose that politics, media coverage and public opinion were additional major considerations. Regardless of the reason(s), it is clear that into the foreseeable future, the use of the Insurrection Act to enable federal

action in state disaster recovery, especially in the absence of state governor support, will likely remain a “last resort” option.

With respect to federal assistance to state authorities during major disasters, perhaps the most significant legislation is the Robert T. Stafford Disaster Relief and Emergency Assistance Act. This act enables the president to direct federal agencies to provide assistance to states when an event overwhelms their internal capability to recover. Congress’ intent, as stipulated in the Act, was “to provide an orderly and continuing means of assistance by the Federal Government to State and local governments in carrying out their responsibilities to alleviate the suffering and damage which result from such disasters...”²⁴. There are two key prerequisites for invoking the Stafford Act. First, the state governor must issue a request to the president for an emergency or major disaster declaration. Secondly, the president must issue a declaration that an emergency or major disaster exists.

All requests for a declaration by the President that a major disaster exists shall be made by the Governor of the affected State. Such a request shall be based on a finding that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the State and the affected local governments and that Federal assistance is necessary.²⁵

According to the Act, federal support can be provided under either emergency or major disaster conditions. An emergency is the more general case and under the Act is defined as, “...any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe...”²⁶ Alternatively, a major disaster is defined as:

[A]ny natural catastrophe (including any hurricane, tornado, storm, high water, winddriven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of

cause, any fire, flood, or explosion...which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance...to supplement the efforts and available resources of States, local governments, and disaster relief organizations...²⁷

In application, the differences between the two conditions are mostly procedural with emergency programs covered under Title V of the Act and major disasters covered under Title IV. What is important is that in either case, both a state governor's request and a presidential declaration are required. However, the Act does provide a minor exception to this rule. Section 403 provides a provision for essential assistance as a subset to the major disaster program. Under this rule, "Federal agencies may on the direction of the President [and prior to a disaster declaration], provide assistance essential to meeting immediate threats to life and property resulting from a major disaster."²⁸ Moreover, actions performed under this rule are limited to a period not to exceed 10 days, after which, continued support would require a disaster declaration.

Additionally, in 2006 (as a direct result of a congressional investigation into the Katrina response), the Post-Katrina Emergency Management Reform Act was signed into law. This Act amended Section 5170(a) of the Stafford Act to expand the Federal Emergency Management Agency (FEMA)'s authorities, in part, to enable them to lean forward by pre-positioning supplies and moving resources in order to "to expedite emergency assistance to stricken areas...and increase federal assistance to victims and communities" prior to a governor's disaster request.²⁹ However, under this amendment, significant direct federal support activities may still not commence without the prerequisite requirements of a governor's request and presidential declaration.

Beyond the Insurrection and Stafford Acts, there is one authority that enables the U.S. military to support civil governments without presidential approval. Currently, DoD

Directive 3025.18 empowers the heads of the DoD Components, with immediate response authority, “In response to a request for assistance from a civil authority, under imminently serious conditions...[to] provide an immediate response by temporarily employing the resources under their control...to save lives, prevent human suffering, or mitigate great property damage...”³⁰ However, such action may only be employed until “the necessity giving rise to the response is no longer present (e.g., when there are sufficient resources available from State, local, and other Federal agencies to respond adequately and that agency or department has initiated response activities) or when the initiating DoD official or a higher authority directs an end to the response.”³¹ Examples of local military commanders utilizing immediate response authority to support civil government include, the 1906 San Francisco earthquake and fire, and the 1995 bombing of the Murrah Federal Building in Oklahoma City.³²

It is important to clarify that when employed under the Stafford Act or under immediate response authority in support of disaster relief, federal forces remain bound by the limits of Posse Comitatus and may not conduct law enforcement activities. Only those forces (i.e., non-federalized National Guard) who are under a governor’s control may perform those functions; that is, in the absence of an Insurrection Act invocation.

The Complex Catastrophe

For the purpose of this thesis, a clear understanding of the expected operational environment that exists in the aftermath of complex catastrophe is necessary. Unfortunately, the Stafford Act definition of a major disaster provided in the previous section is insufficient.

According to the NRF, “A catastrophic incident is defined as any natural or manmade incident, including terrorism, that results in extraordinary levels of mass

casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.”³³ Additionally, a Government Accountability Office report concerning gaps in homeland defense and civil support guidance provides, “A complex catastrophe is an incident that has cascading effects, such as an earthquake that causes widespread casualties, displaces households, and damages major transportation and utilities such as electricity, water, and gas.”³⁴ As such, despite devastating effects caused by Hurricane Katrina, this author would not consider that event as a complex catastrophe as the majority of its destructive impact remained localized to southern Florida, eastern Louisiana and Mississippi, and its negative impacts did not significantly cascade across a larger region of the country.

As pointed out previously, a New Madrid earthquake scenario would serve as a better example of a complex catastrophe. In a project funded by FEMA, the Mid-America Earthquake Center at the University of Illinois developed a scenario to estimate the regional impacts and consequences of an earthquake event in the New Madrid Seismic Zone (NMSZ). The results illustrated widespread damage across eight states and spanned four FEMA regions (Regions IV, V, VI and VII).³⁵ See Figures 2 and 3.

The study estimated that the damage to critical infrastructure (essential facilities, transportation systems, utility systems, dams, levees, etc.) was substantial in 140 counties located near the rupture zone, including 3,500 damaged highway and rail bridges and nearly 425,000 breaks and leaks to both local and interstate pipelines.

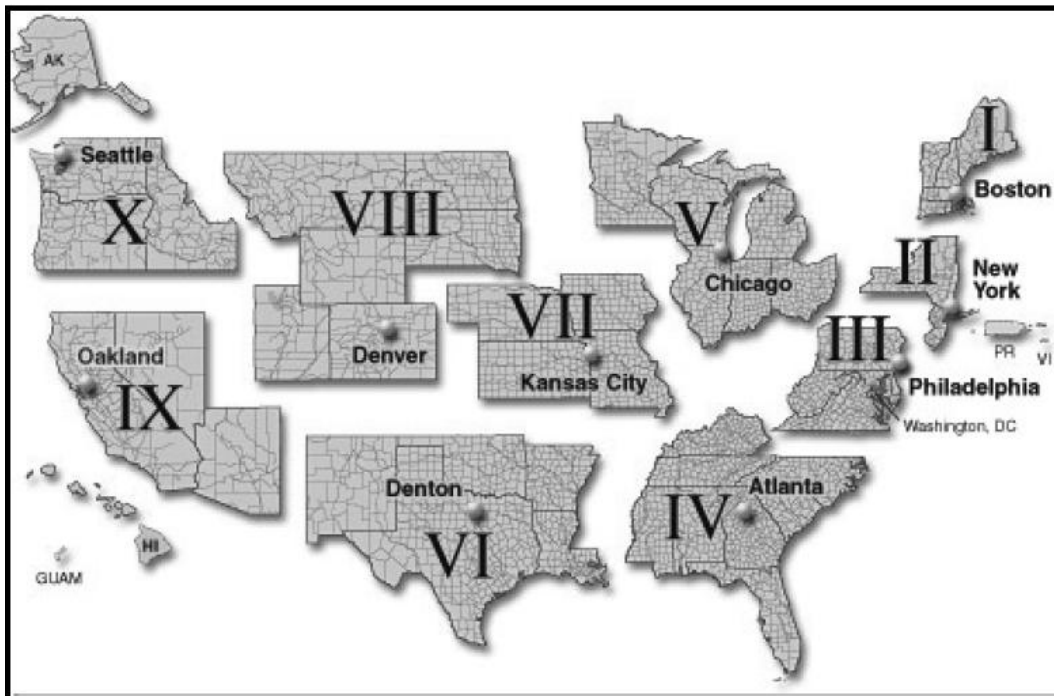


Figure 2. FEMA Regions³⁶

Roughly, 715,000 buildings were damaged including some 130 hospitals. Approximately 2.6 million households were left without power and nearly 86,000 injuries and fatalities resulted. Even three days after the earthquake, 7.2 million people were still displaced and 2 million people required temporary shelter. In total, the direct economic loss over the eight states was calculated at nearly \$300 billion, but indirect losses were estimated to exceed twice that amount.³⁷

With hundreds of airports, ports, rail heads and transportation networks damaged, the movement of people and goods through the region by air, water, road and rail would be severely degraded and this would also greatly impede the movement of response workers, relief supplies, and evacuation efforts. For example, the study estimated that 42,000 search and rescue personnel would be required for immediate action across the region, but recognized that extensive damage to roadways and

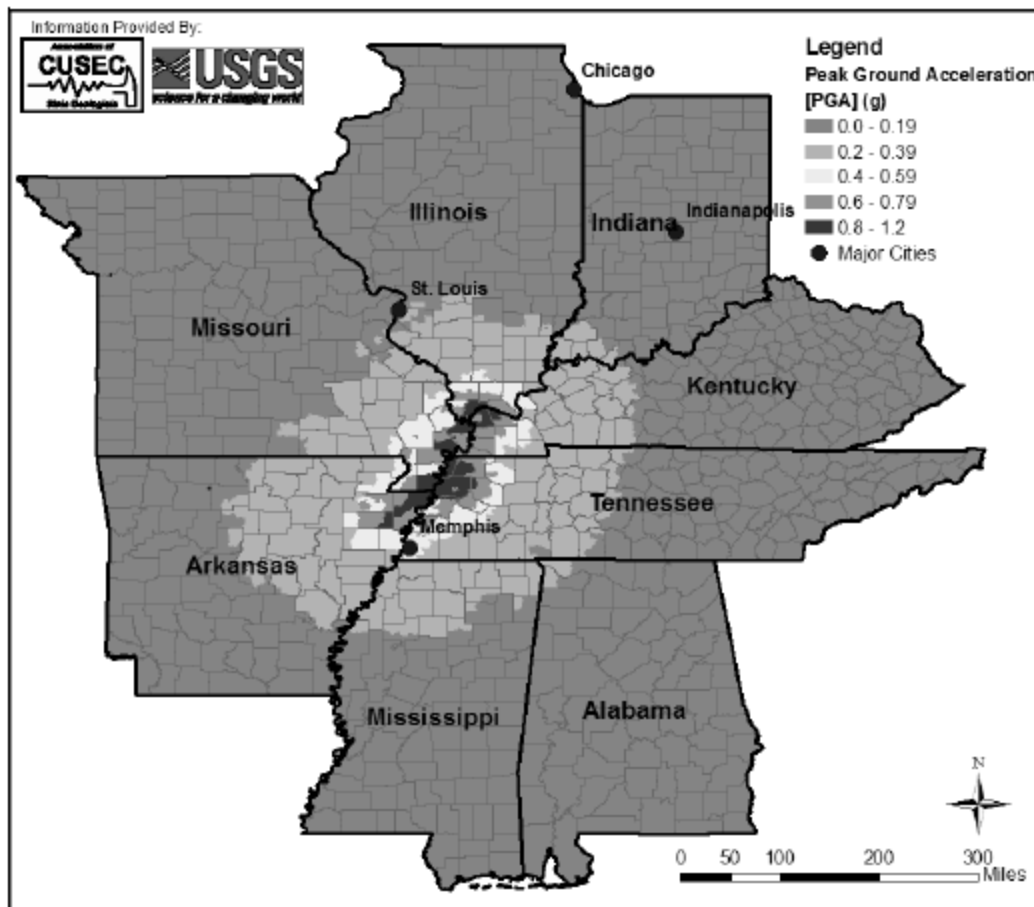


Figure 3. NMSZ Scenario Event - Peak Ground Acceleration³⁸

bridges between Memphis, TN, and St. Louis, MO, would greatly handicap emergency response team movements as well as population evacuations.³⁹

Utility infrastructure was also heavily compromised throughout the eight-state region. With over 9,700 communication facilities damaged, many counties were without communication services, which would also hamper coordination of emergency and relief efforts. Thousands of water, oil, natural gas, and electric power facilities were damaged, limiting regional utility service capabilities. Moreover, major damage to interstate natural gas and oil pipelines would severely impact commodities distribution across the country.⁴⁰ See Figure 4.

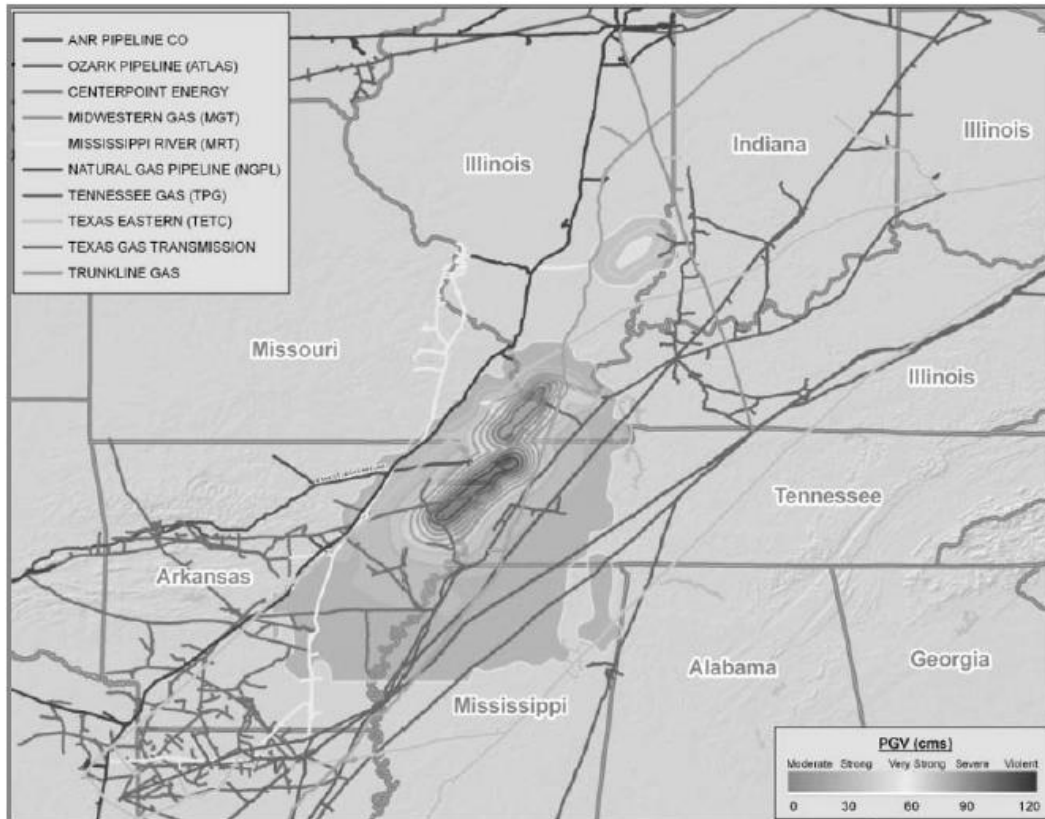


Figure 4. High-risk Oil and Gas Pipelines crossing NMSZ⁴¹

In addition to the NMSZ study, FEMA has modeled a range of other complex catastrophe scenarios. Some characterize dreadful impacts, including “190,000 deaths in the initial hours; 265,000 citizens requiring emergency medical attention...,” with damage and devastation spread out over 25,000 square miles.⁴² In all of these scenarios, the resulting socio-economic impacts would be massive, long-standing and felt nationwide .

Thus, the complex catastrophe exponentially exacerbates the typical challenges associated with emergency response and recovery operations caused by large disasters. Due to the immense difficulties in dealing with the expanse of devastation, multiple civil jurisdictions and governors, numerous agencies (both governmental and

nongovernmental), unreliable transportation and communication systems, etc., attempting to achieve unity of effort through the chaos is clearly daunting. Therefore, a simple, straightforward, and tiered command and control structure that integrates a whole of community approach, with authorities and responsibilities clearly delineated at all levels, is paramount to success.

Disaster Response Command Structure

With a foundation of the legal rules and limitations afforded in our federalist system of government, and an understanding of the scope and challenges of a complex catastrophe, we provide the backdrop on which we can consider command and control structures that can organize federal, state and local response in a manner to achieve unity of effort using a whole of community approach.

Dr. Christopher Bellavita, the Director of Academic Programs at the Naval Post Graduate School, has suggested that in a complex catastrophe (or a “meta-disaster” as he terms it) unity of effort is impossible. Due to the expected level of devastation, he provides that, “if the structure and process of Unity of Effort are still present...maybe you’re not really talking about a catastrophe.”⁴³ His main point is that since the people expected to respond to disasters, at least locally, will likely be gone, perhaps instead of attempting to control the chaos, we should focus our energy and resources on figuring out how order can be reconstructed from it.⁴⁴

This author, however, does not see Dr. Bellavita’s point as mutually exclusive to the concept of unity of effort. Recognizing that under such a disaster, local first responders may be destroyed, minimized or simply too focused on their own families’ needs to help others, does not preclude individual citizens from helping themselves and their neighbors. With some very basic level of training and preparedness, every capable

citizen can contribute to the relief effort even in the midst of devastation and without specific direction from recognized authorities. And as individuals and communities step up to begin relief and recovery efforts themselves, this author would argue that they are succeeding in achieving unity of effort by working toward the immediate goals of saving lives, minimizing human suffering, providing general security, and mitigating further damage to property and the environment to the best of their abilities until they can be further organized or relieved by higher government or nongovernmental organization (NGO) relief agencies.

The foundational document for U.S. emergency and disaster response is the NRF. In this author's opinion, it is brilliant document that is both simplistic and generic enough to be applicable to any emergency, yet provides specific guidance and actionable requirements to all levels of the community (federal, state, local and private sector) in a manner that facilitates unity of effort.

It is built upon scalable, flexible, and adaptable coordinating structures to align key roles and responsibilities across the Nation, linking all levels of government, nongovernmental organizations, and the private sector. It is intended to capture specific authorities and best practices for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters.⁴⁵

The NRF provides us with functional response doctrine which is comprised of five key principles and is applicable to all levels of government and communities:

(1) engaged partnership, (2) tiered response, (3) scalable, flexible, and adaptable operational capabilities, (4), unity of effort through unified command, and (5) readiness to act.⁴⁶ It recognizes that disaster response begins and ends at the local level and mandates a whole of community approach. The NRF affirms, "Effective response to an incident is a shared responsibility of governments at all levels, the private sector and

NGOs, and individual citizens.”⁴⁷ Higher levels of support are added only if lower levels exceed their organic capacity to recover themselves. The Framework ensures that response structures remain as simple and efficient as possible, thus enabling relief services to be delivered as rapidly as the situation allows. Finally, it conveys that:

Effective unified command is indispensable to response activities and requires a clear understanding of the roles and responsibilities of each participating organization. Success requires unity of effort, which respects the chain of command of each participating organization while harnessing seamless coordination across jurisdictions in support of common objectives.⁴⁸

Local Level

“The responsibility for responding to incidents, both natural and manmade, begins at the local level – with individuals and public officials in the county, city, or town affected by the incident.”⁴⁹ In this context, the term “local” includes county, city and municipal governments, private businesses (especially “privately owned critical infrastructure, key resources, and other private-sector entities that are significant to...recovery from the incident”⁵⁰), NGOs (i.e., American Red Cross, community-based/veterans service clubs, and other voluntary organizations typically active in disasters), and individuals.

It must be realized by every citizen in every community that, given a complex catastrophe, external aid may not be able to be delivered to isolated areas for days or weeks. Such an actuality necessarily places great responsibility at the local level to prepare for and subsequently manage the immediate aftermath without state or federal assistance.

Even when a community is overwhelmed by an incident, there is still a core, sovereign responsibility to be exercised at this local level, with unique response obligations to coordinate with State, Federal, and private-sector support teams. Each organization or level of government therefore

has an imperative to fund and execute its own core emergency management responsibilities.⁵¹

Additionally, as soon as practical, local communities are required to organize and establish an Incident Command System (ICS) and Emergency Operations Center (EOC) to provide unity of effort in local emergency, relief and recovery operations, and establish communications with higher authorities (and neighboring communities). In the ideal case, trained Incident Command personnel (typically first responders) would be available and could be utilized. However, if no such personnel are available, individual citizens should organize and accomplish this function to the best of their ability. See Figures 5 and 6.

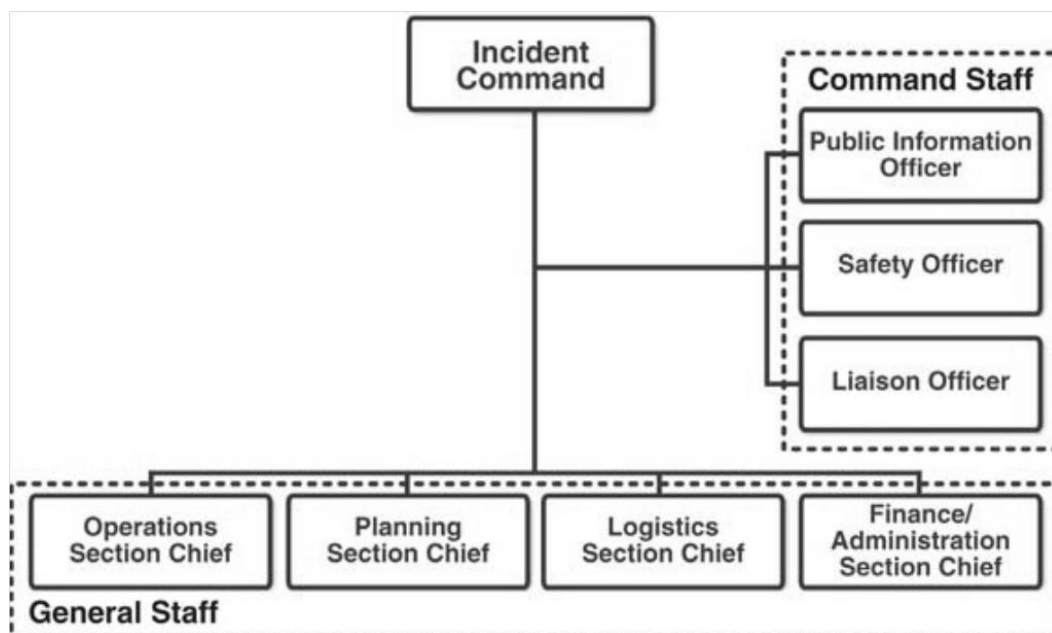


Figure 5. Incident Command Structure⁵²

Thus, the citizenry must become more self-reliant and prepared-minded. Local government and NGO's can facilitate this by conducting town hall meetings, participating in community events, engaging schools, etc. These events should provide basic disaster preparation training (preferably locally-tailored), and distribute emergency

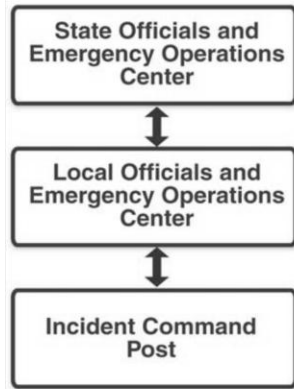


Figure 6. State and Local Command Relationship⁵³

response checklists and lists of recommended emergency supplies to be stockpiled in “shelter-in-place” and “bug-out” kits for individuals, families, and businesses. Much of this information is readily available on the FEMA website www.ready.gov.

Mass gathering locations, where practical, should maintain larger kits that will facilitate their use as temporary relief stations until permanent shelters can be accessed and activated. Also, if not already established, county, townships and municipalities should establish shelters and disaster relief stores in secure, structurally survivable facilities that are strategically located throughout the community. Finally, local first responders should establish mutual aid and assistance agreements with neighboring communities.

Resilient communities begin with prepared individuals and depend on the leadership and engagement of local government, NGOs, and the private sector. Individuals, families, and caregivers to those with special needs should enhance their awareness of risk and threats, develop household emergency plans that include care for pets and service animals, and prepare emergency supply kits.⁵⁴

By following the guidance provided in the NRF, and with some pre-planning, basic training, and emergency supplies, local communities can organize themselves to autonomously begin incident management of immediate relief and recovery operations

with unity effort well before they can be organized and integrated into the larger state or federal response systems.

State Level

In our federalist government, the state serves as the center of gravity of our national response system.

A primary role of State government is to supplement and facilitate local efforts before, during, and after incidents. The State provides direct and routine assistance to its local jurisdictions through emergency management program development and by routinely coordinating in these efforts with Federal officials. States must be prepared to maintain or accelerate the provision of commodities and services to local governments when local capabilities fall short of demands.⁵⁵

There is no standard organizational structure for standing state emergency management agencies. They vary from state to state and may change when new governors take office. According to the National Emergency Management Association:

Currently, in 12 states, the emergency management agency is located within the department of public safety; in 18 states it is located within the military department under the auspices of the adjutant general; in nine states, it is within the governor's office and eight states have it in a combined emergency management/homeland security agency. The five remaining states have other organizational structures.⁵⁶

Regardless of the specific structure of the emergency management function, the state remains ultimately responsible for coordinating the overall state response. The state EOC serves as the fusion center to collect and prioritize requirements elevated from lower EOCs/communities and focuses available state resources (including NGOs) in a manner to achieve unity of effort. In cases where local resources are not adequate, the state EOC may dispatch support teams (i.e., incident management teams or specialized response teams) and materials to the scene to assist in the recovery effort. If the resources required exceed the state's capacity, the state EOC can activate pre-

arranged assistance agreements from other states (e.g., Emergency Management Assistance Compact (EMAC)) or through support agreements with NGOs. As a last resort, the governor can request a Presidential declaration to open the door for federal aid under the Stafford Act. See Figure 7.

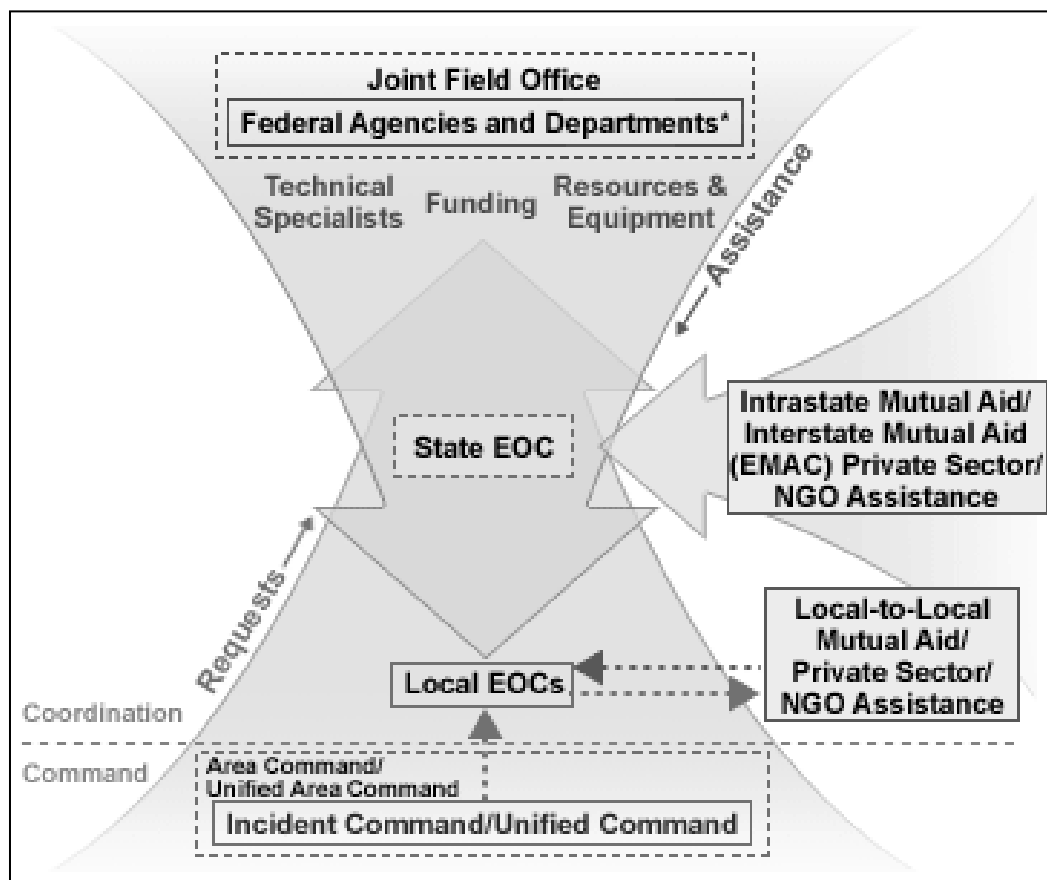


Figure 7. Flow of Requests and Assistance⁵⁷

Additionally, in urgent circumstances, “local agencies may request certain types of Federal assistance directly in non-Stafford Act situations. For example, the Environmental Protection Agency or U.S. Coast Guard may assess or mitigate oil or chemical spills without waiting for requests from State, tribal, or local officials.”⁵⁸

A key state resource for emergency response is their National Guard specialized response teams (e.g., hazardous materials; chemical, biological, radiological, nuclear;

etc). As a result, governors will likely resist federalization of these resources during an emergency even if federal aid is requested. As discussed above, the president may have the authority to override the governor (i.e., in cases where the Insurrection Act can be invoked), but for political and/or federalist reasons will likely be hesitant to do so. For example, even with the destruction caused by Katrina, neither Governor Jeb Bush (FL), Governor Barber (MS), nor Governor Blanco (LA) accepted President Bush's offer to organize their respective Guard under a single federal DSC.⁵⁹

In addition to the Guard, and if states have established them, governors can also activate their state defense forces. State defense forces are authorized under Title 32 U.S.C. Section 109 and are a low-cost, effective way to supplement National Guard forces. "In order to be legitimate military forces, they must be formed in accordance with the constitutions and laws of the respective states, serve under the governors, and be commanded by the adjutants general of the states."⁶⁰ These units are entirely composed of volunteers (many former veterans), who train without reimbursement and usually provide their own equipment. Moreover, as they are not National Guard forces, they cannot be federalized and thus will always be available to the governor to support state requirements. Unfortunately, at present, only 21 states and Puerto Rico have established some form of state defense force.⁶¹

It must also be recognized that during a complex catastrophe, state command and control systems and response capabilities may become immediately overwhelmed or be otherwise nonfunctional. As such, states should establish "communications out" procedures that would enable critical state response agencies to autonomously begin relief operations in the absence of formal direction from the State EOC in the immediate

aftermath of a disaster. Additionally, governors should coordinate agreements with their supporting FEMA regions that defines the scenarios and conditions under which limited federal action could be activated should the state command and control system be inoperative. Alternatively, in such cases, clearly the invocation of Insurrection Act by the president may be warranted as the state government is not operable. Accordingly, the NRF Catastrophic Incident Annex provides provisions for proactive, expedited federal response to such events. “The primary mission is to save lives, protect property and critical infrastructure, contain the event, and protect the national security.”⁶² Such actions would bridge the gap to provide unity of effort until the state command and control structure can be restored.

Federal Level

The federal level of disaster response is the most complex and challenging to achieve unity of effort due the statutory split in the chains of command between state and federal forces as mandated by our federal system of government. As pointed out previously, federalizing a state’s National Guard forces is a double-edged sword. Though it provides more direct resources for the federal commander, it also removes critical operational resources that governors depend upon to augment their organic state emergency response and security capacities.

The NRF establishes the Joint Field Office (JFO), subordinate to the Department of Homeland Security, as “the primary Federal incident management field structure... that provides a central location for the coordination of Federal, State, tribal, and local governments and private-sector and nongovernmental organizations with primary responsibility for response and recovery.”⁶³ Led by the Unified Coordination Group, the JFO provides unity of effort in prioritizing, coordinating and supporting specific on-scene

efforts as well as larger, general recovery and relief operations. Additionally, “When incidents impact the entire Nation or multiple States or localities, multiple JFOs may be established.”⁶⁴ See Figure 8 below.

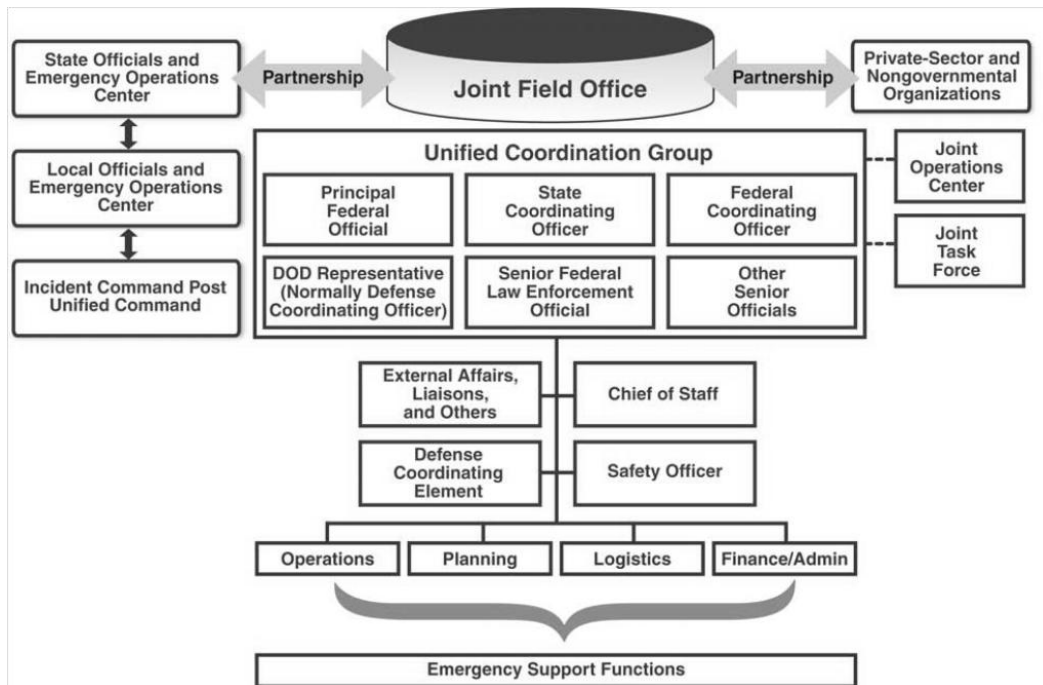


Figure 8. Federal Joint Field Office⁶⁵

However, the JFO neither manages on-scene operations, nor commands military forces. In that regard the NRF is silent.

In a post-Katrina Rand study, the authors identified the main point of contention over the military command and control structure during Katrina and other historical disasters as “the relationship between federal and state governments and their control of active-duty and National Guard forces,”⁶⁶ and presented four alternatives structures. Unfortunately, they did not evaluate the efficacy of their alternatives against disaster events citing that, “...there is, in fact, no single [command and control] structure that

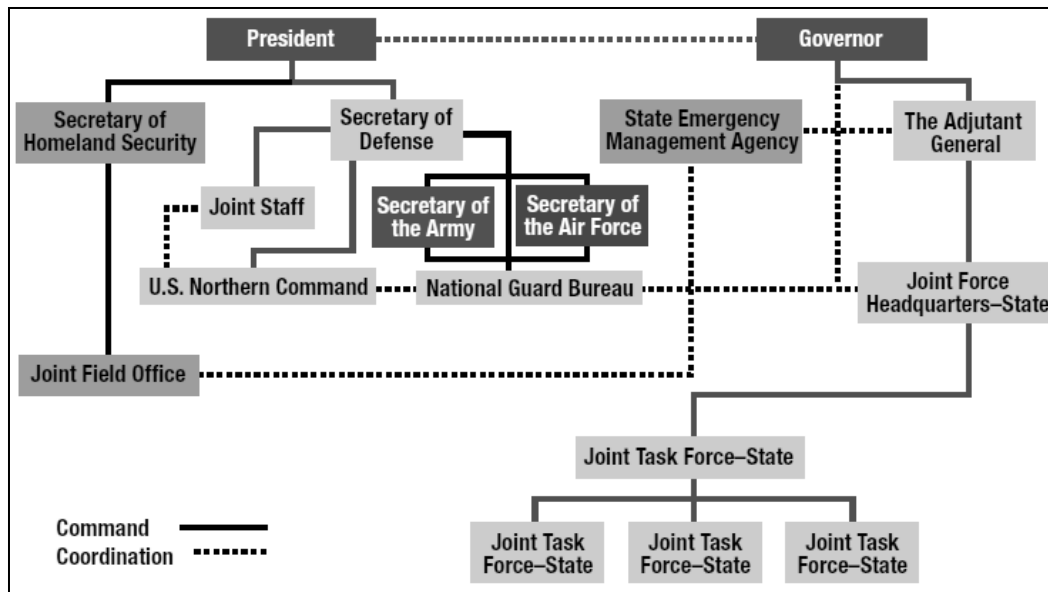
would be appropriate for every domestic emergency, as not only will relief needs vary but also the response capabilities of individual states where the disaster hits.”⁶⁷

Additionally, the authors stated that they did not consider an option where the state governor maintained control of all forces as occurred after the World Trade Center bombings in New York City, as it was “unlikely that there would be no need for active-duty forces in future catastrophic emergency responses and, therefore, [no] need for a federal [command and control] structure”.⁶⁸ The authors also excluded the case in which the president would federalize the National Guard to place all military forces in Title 10 status, as was done during the Los Angeles riots in 1992, due to the resulting Posse Comitatus Act restrictions which would greatly limit their utility.⁶⁹ This thesis will provide an assessment of these six structures against the backdrop of a complex catastrophe.

Alternative 1. State Command

In a state command structure, the governor retains full control of his forces through a Joint Force Headquarters(JFHQ)-State. See Figure 9. Non-military federal support may be provided through a JFO, but no Title 10 military forces (active duty or reserves) may be deployed to support disaster relief/recovery operations in the region. The advantages of this structure include, preservation of state control over response, unity of command and effort, simplicity, speed, and no Posse Comitatus restrictions. The greatest disadvantage is the lack of the ability to integrate federal military resources for additional support.⁷⁰

Assessing this command structure against the expected span of destruction in a complex catastrophe, this author concurs with the conclusion of the Rand study. It is erroneous to assume that Title 10 forces will not be involved; history has repeatedly illustrated that Title 10 forces will be involved in large events. Also unity of effort would



only be achieved within the boundaries of each state, and not globally across the entire multi-state area of damage.

Alternative 2. Parallel Command

In a parallel command structure, there are separate and distinct federal and state military chains of command. This structure is similar to what “emerged during the response to Hurricane Katrina, where the two types of forces mostly operated independently under their own control and were separated into geographic areas of operations.”⁷² Thus, USNORTHCOM’s JTF-Federal would control all Title 10 forces, while each state’s National Guard forces (as well as any additional Guard forces received from other states under EMACs) would remain under the command of their respective adjutant general through each JFHQ-State. Coordination between JTF-Federal and the various JFHQ-States would be accomplished through a Defense Coordinating Officer (or liaison officer) residing in each JFHQ-State control center. See Figure 10.

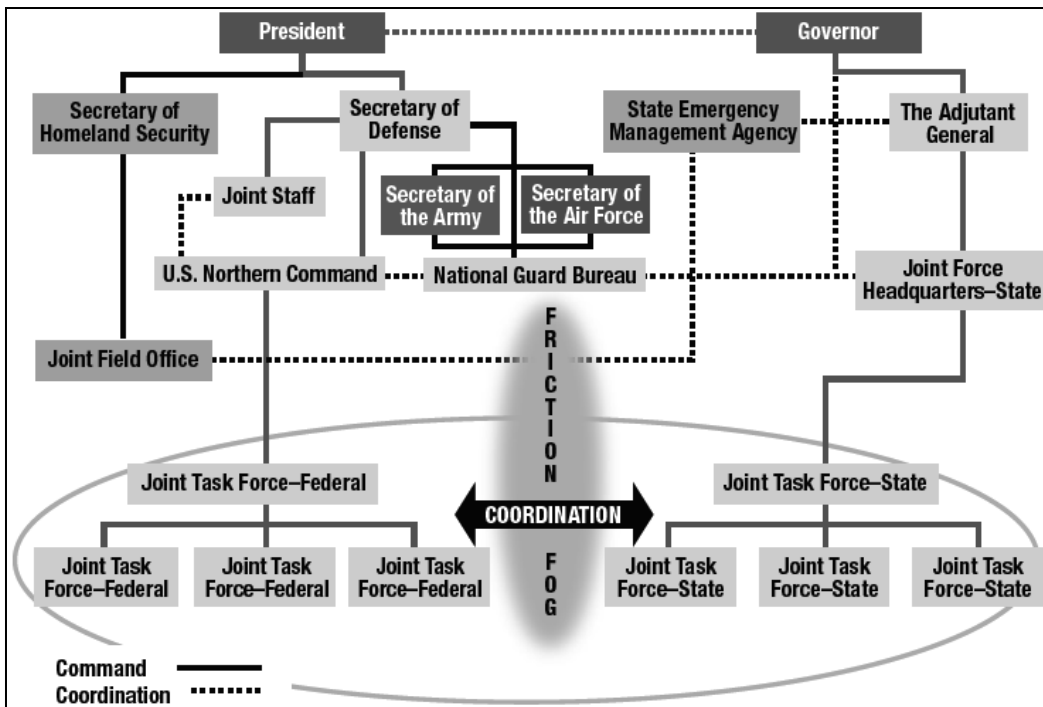


Figure 10. Parallel Command Structure⁷³

The primary advantage of this structure over the State Command is the ability to deploy federal troops to support state requirements while maintaining a clear separation between the authorities of federal and state forces. The greatest disadvantage is “the increased complexity of activity coordination due to division of command at the operational level.”⁷⁴ As a result, this construct makes unity of effort much more difficult with federal and state forces operating within each state, but report through separate chains of command. In the past, “the parallel structure has been the standard model for civil support operation” and its unity of command difficulties have been illustrated repeatedly, most recently with Katrina.⁷⁵

After a complex catastrophe, this system would have a mechanism of delivering aid quickly through the federal system until the state system came back online. However, once the states are operating, the complexities created by independent

chains of command would be greatly magnified due to the extent of the chaos. Thus, unity of effort may become difficult to sustain.

Alternative 3. JFHQ-State Lead

In a JFHQ-State lead structure, the formal command relationships between federal and state forces remain the same as in the parallel structure. However, under this alternative USNORTHCOM would CHOP (CHange of OPERational control) tactical control of its Title 10 forces to the JFHQ-State to execute response operations.⁷⁶ See Figure 11.

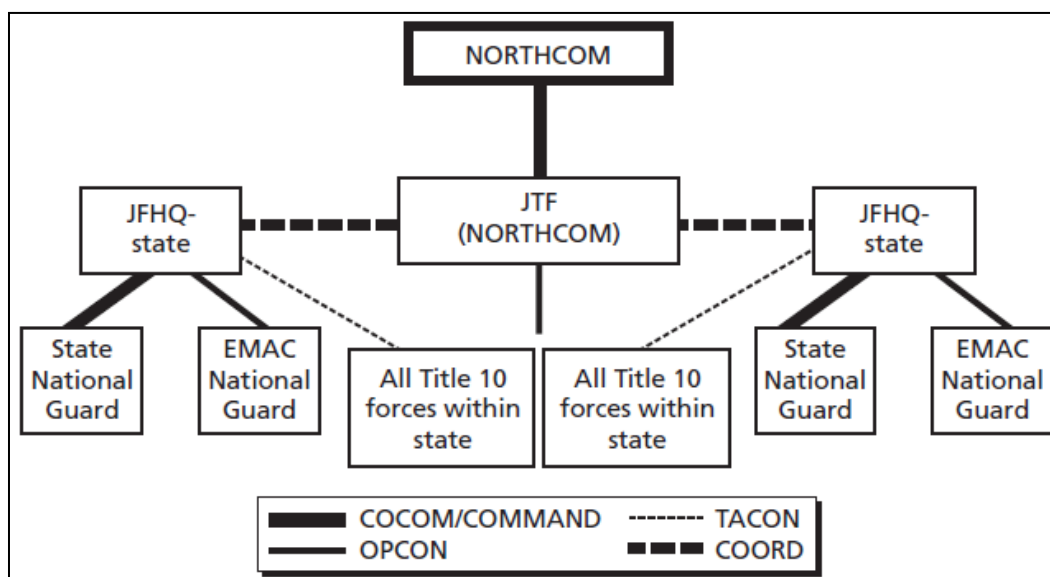


Figure 11. JFHQ-State Lead Structure⁷⁷

This structure's main advantage is that it improves unity of effort between federal and state forces operating within a state, while NORTHCOM's JTF-Federal can maintain oversight of at larger regional level to drive unity of effort across state boundaries. The disadvantage with this model is an increased complexity in the management of Title 10 forces. In order for USNORTHCOM to maintain the statute-mandated formal chain of command with the CHOP'ed forces, JFHQ-State's would only

receive tasking authority for certain prior agreed-upon missions. This would greatly limit the flexibility of JFHQ-State in utilizing Title 10 forces in an evolving situation on the ground. Any new tasking requirements would have to be vetted through JTF-Federal prior to executing, and therefore may significantly reduce response time.⁷⁸ Additionally National Guard commanders must remain cognizant of the Posse Comitatus limitations of Title 10 forces.

Since federal responses are implemented through the JFHQ-States in this model, recovery and relief operations would not be able commence until there is a functioning state structure. This will be problematic after a complex catastrophe when state systems may be disrupted and unable to effectively manage operations immediately. This effect could cause great delays in distributing rapid disaster assistance.

Alternative 4. USNORTHCOM JTF-Federal Lead

This option is very similar to the JFHQ-State lead case in that the formal command relationships between federal and state forces remain the same. However, under this alternative the state adjutant generals would CHOP tactical control of their National Guard (EMAC's included) to USNORTHCOM to execute response operations.⁷⁹ See Figure 12.

This structure's advantages and disadvantages are nearly identical to that of the state JFHQ lead structure except, that the situations are reversed. Guard forces CHOP'ed to USNORTHCOM would be limited by the missions that the JFHQ-States had pre-approved. New Guard missions would have to be vetted and approved, thus delaying response times. Federal commanders must also be aware that Guard forces remain in state status and therefore are not restricted by Posse Comitatus.⁸⁰

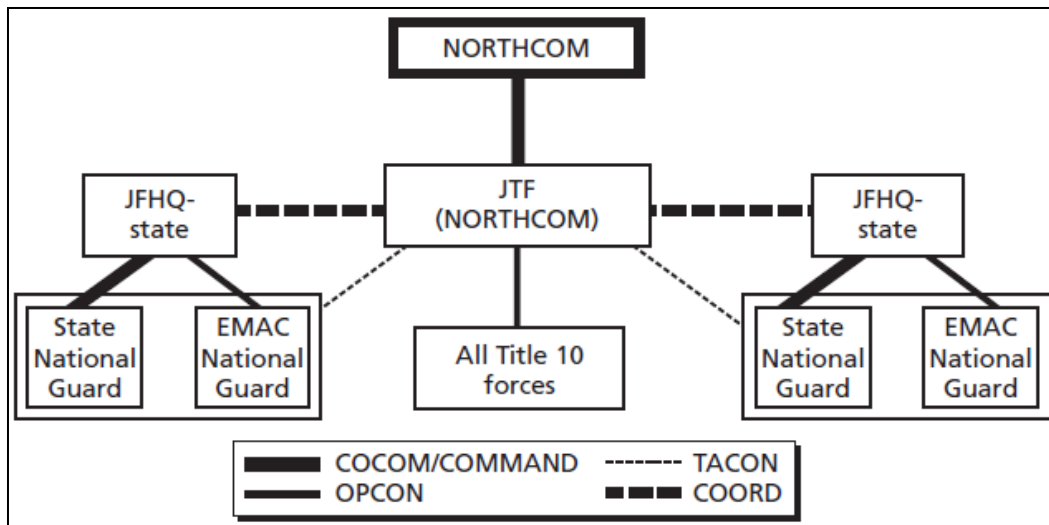


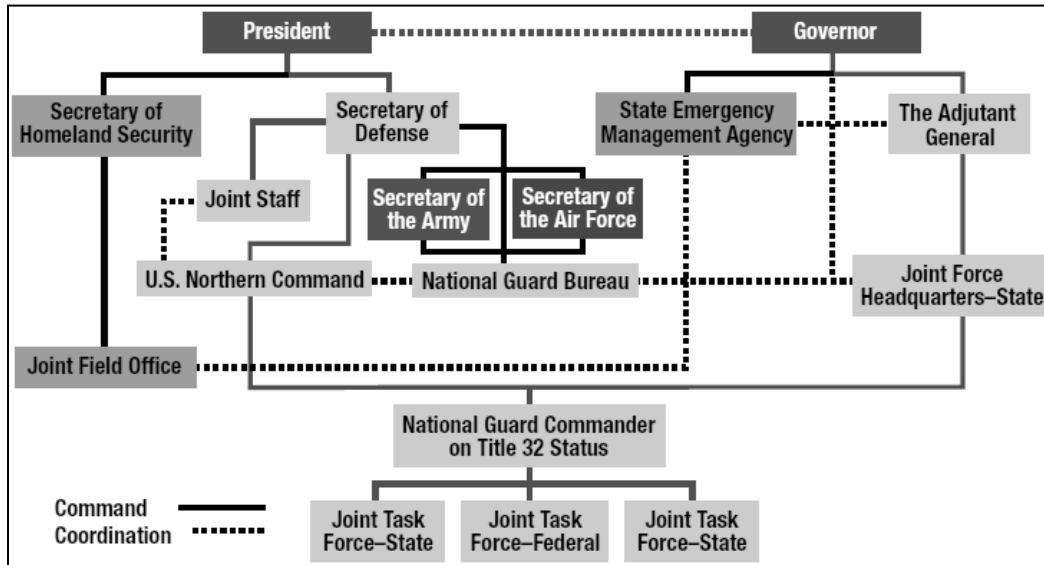
Figure 12. USNORTHCOM JTF-Federal Lead Structure⁸¹

With respect to complex catastrophes, this model solves the main shortfall of the JFHQ-State lead alternative. That is, in the absence of a functional state system, this option enables federal forces to begin recovery and relief operations immediately, however the USNORTHCOM-National Guard management process remains inefficient.

Alternative 5. Dual Status Command

Under this alternative, a single DSC (either Title 10 or Title 32) is provided specific authority to command both assigned federal and National Guard military forces of a particular state. Procedures are applied to ensure that the federal forces are not assigned tasks which violate law or policy (i.e., Posse Comitatus). See Figure 13.

The DSC remains a fairly new concept having been first established under the 2004 National Defense Authorization Act, and at that time, was only approved for pre-planned events.⁸² However, since implementation, a multitude of literature has repeatedly documented stunning successes in a variety of pre-planned events. Unfortunately, the first opportunity to test this command structure in a no-notice event



presented itself during Katrina.⁸⁴ In that case, as previously discussed, the reluctance of the governors and the president prevented the assignment of a DSC. When President Bush finally deployed Lieutenant General Honoré to command Joint Task Force Katrina, as a Title 10 officer, he was only authorized to command federal forces. However, in effect, he took control of all military forces “with his strong will and force of personality”, thereby creating unity of effort.⁸⁵

The great advantage of the DSC is that it solves most of the deficiencies of the other command structures presented in this thesis, and thus appears to be the superior organization for single state or small multi-state events such as Hurricanes Katrina and Sandy. First and foremost, it provides both unity of command and unity of effort for both federal and National Guard forces simultaneously.⁸⁶ It also uniquely enables either USNORTHCOM or the state to take the lead role, depending on the situation on the ground, without changing the organizational structure. This provides great flexibility to

the DSC to quickly adjust to a changing environment and maintain efficiency in response. It also enables him to both grasp the higher “big picture” perspective of USNORTHCOM while still maintaining his “local” focus on state requirements, and understand how they fit together in a way that can complement each other. To date, all DSCs have been Title 32 Guardsmen from their own state, and as such, likely had the additional benefit of being “familiar with local first responders, civil authorities, and local government agencies and their emergency management procedures.”⁸⁷

However, there are a few challenges with this command structure. First, though Title 10 officers are authorized to serve as DSCs, none have been approved to date. Recall that the governors must approve the president’s DSC nominees and they are unlikely to endorse someone who is not from their state. The governors’ positions on this aspect are not necessarily due to pure parochialism, however. As pointed out in the previous paragraph, National Guard personnel are typically much more knowledgeable of their state’s emergency management personnel, procedures and capabilities. Thus, preferring Guardsmen DSCs over Title 10 DSCs is seemingly advantageous.

Nevertheless, perhaps the greatest challenge to the current DSC construct is in complex catastrophe situations:

The Joint Action Plan states that past multistate emergencies such as Hurricane Katrina demonstrate that a coordinated and expeditious state-federal response is crucial to saving and sustaining lives, and it indicates that DOD and the several states will address the use of the dual-status commanders for such scenarios. However, DOD’s concept of operations does not address how to use a dual-status commander in these scenarios. According to DOD, they are continuing to work with the Council of Governors to address the use of dual-status commanders in complex catastrophes affecting multiple states.⁸⁸

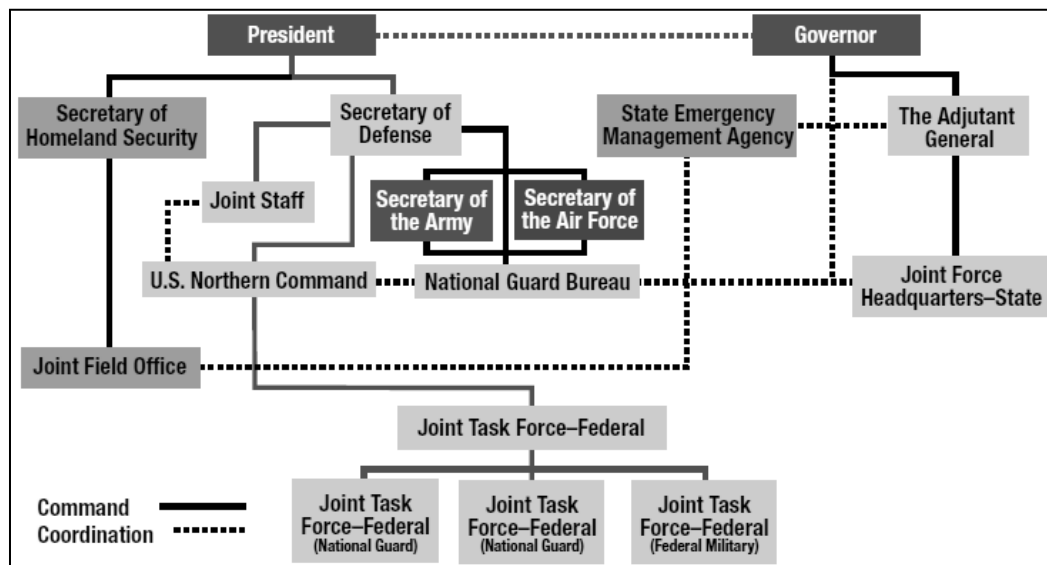
Thus, there is not a proposed organizational construct developed for how best to employ the DSC concept in a large multi-state disaster. As currently employed, each

state would be assigned its own DSC. Therefore, in a situation like the NMSZ scenario, USNORTHCOM would need to manage and support the requirements of eight dual-status commanders at eight state JFHQs and four JFOs (one for each FEMA region). USNORTHCOM could also elect to stand up multiple JTF-Federals depending on the extent of the destruction. Maintaining unity of effort in such a situation may be lost in such complexity.

After considering the option, the author does not recommend establishing a single dual-status commander with responsibility for multiple states. As Ludwig Schumacher points out, “any multi-state DSC construct would immediately conflict with the responsibilities of governors for the welfare of the citizens of their states...”⁸⁹, recalling that it is very unlikely for governors to approve DSC’s from outside their state. Also, “a multi-state DSC charged with prioritizing resources between states would be in the immediately untenable position of being in conflict with the Lead Federal Agency, the federal coordinating official, and the governors of the several states.”⁹⁰ Moreover, “...the DSC will be from one of the states, and any appearance of favoritism will immediately end the effectiveness of a multi-state DSC.”⁹¹

While maintain the DSC construct at the state level, an alternative command and control possibility would be to establish a USNORTHCOM Joint Interagency Task Force (JIATF), which included representation from both DoD and DHS, as well as, the impacted states, NGOs and other relief agencies, that would more effectively create a unified command across the entire impacted region. In the chain of command, the JIATF would be superior to the both the individual JTF-Federals and JFOs and work to resource, deconflict and integrate requirements flowing up through the DSCs and

JTFs/JFOs. However, where the JTFs/JFOs would be regionally orientated, the JIATF would maintain a national perspective, and establish strategic goals and priorities for recovering the nation; thereby maintaining unity of effort at the national level.



Though this option achieves unity of effort, it has numerous drawbacks. First, history has shown reluctance of governors to release their National Guard forces during times of crises with their states. Presidents are equally reluctant to violate state sovereignty and pull this essential disaster assistance capability from the governors. At best, this option would only be employed temporarily to assist in getting their state's emergency management system functional. However, once that occurs, it is most likely that Guard forces will be returned to the control of their JFHQ-State. Additionally, once federalized, Guard forces lose their Posse Comitatus exemption and thus limits their functional

capability. Thus, this author agrees with the Rand report that this option does not seem very viable. It is far inferior to the DSC option presented above.

Recommendations to Enable/Improve Unity of Effort

This section synthesizes the author's recommendations for actions taken at the local, state and federal levels that have the potential for improving unity of effort using a whole of community approach with respect to the unique widespread effects of complex catastrophes.

Local Level

Given the likelihood that state or federal aid may take days or weeks to reach isolated areas due to the level and extent of destruction, including transportation and communication networks, the author recommends that:

(1) Local governments and NGO's establish tailored disaster preparation training programs (to include basic ICS), emergency response checklists and lists of recommended emergency supplies to be stockpiled by every citizen/family.

(2) Individuals/families be strongly encouraged to establish their own stockpiles of emergency supplies to sustain themselves to shelter-in-place for up to 14 days and to maintain "bug-out" kits in the event that evacuation would become necessary

(3) Large businesses and owners of mass-gathering locations be encouraged to build shelter-in-place kits to provided temporary relief and aid.

(4) Counties, townships and municipalities evaluate their emergency/disaster relief command structure, procedures, shelters and supply stores against likely complex catastrophe scenarios, and make adjustments as required, to provide for limited and isolated autonomous capability.

(5) Counties, townships and municipalities attempt to maximize, as practical, regular citizen involvement in emergency response exercises. Such experience should prove useful post-disaster if first responders are overwhelmed or become ineffective.

State Level

Given the likelihood that present state resources and capabilities will be quickly overwhelmed and federal assistance may take days to arrive due to the level and extent of destruction, including transportation and communication networks, the author recommends that:

(1) States evaluate their emergency/disaster relief command structure, procedures, shelters and supply stores against likely complex catastrophe scenarios, and make adjustments as required, to provide for limited and isolated autonomous capability. States should also consider purchasing a mobile command center and a mobile emergency communication system in case their permanent facilities become unusable.

(2) States review their EMAC agreements to assess if states tasked to provide aid may also be impacted by the same disaster. States should consider expanding agreements to include other states that are located outside of the expected immediate disaster region (coastlines, seismic fault zones, tornado corridors, etc.).

(3) States establish or expand their State Defense Force and have them train with their National Guardsmen on a recurring basis. States should also include them in local and state emergency response exercises.

(4) States ensure they have DSCs appointed, approved and trained. States should also appoint a National Guard deputy commander and ensure USNORTHCOM has appointed a Title 10 deputy commander. All should participate regularly in state

emergency management exercises to maintain proficiency with players, teams and procedures.

Federal Level

Given the likelihood that state capabilities may be quickly overwhelmed or incapacitated, the author recommends that:

(1) FEMA reconsider their regional boundaries and perhaps redefine them to take into account likely disaster zones (coastlines, seismic fault zones, tornado corridors, etc.) in order to minimize the expected number of FEMA regions impacted by a single disaster.

(2) DHS and USNORTHCOM define a command and control structure for a complex, multi-state catastrophe event that creates a Unified Command at the macro scale. One possible alternative could be the JIATF structure proposed here.

Conclusion

Unity of effort remains a fundamental principle in efficiently executing any large, difficult task. Joint Publication 1 tells us:

Unity of effort can only be achieved through close, continuous interagency and interdepartmental coordination and cooperation, which are necessary to overcome discord, inadequate structure and procedures, incompatible communications, cultural differences, and bureaucratic and personnel limitations.⁹³

Attempting to achieve unity of effort to recover our communities, our states, and our nation, while in the midst of the chaos created in the aftermath of a complex catastrophe, will undoubtedly be extremely difficult. However the NRF provides an effective, tiered, and adaptable structure that can accomplish effective unity of effort even in the most dire of situations if citizens, communities, and state and federal governments are adequately prepared and organized. The Framework has been

revised and retooled to accommodate the lessons learned from 9/11 and Katrina, and it will continue to be improved as we find better ways of energizing a whole of community approach to emergency and disaster response.

Innovative command and control concepts as the DSC and perhaps a USNORTHCOM JIATF will further enhance coordination and efficiency in relief and recovery operations...actions which ultimately serve to save lives, mitigate suffering, and protect and restore the nation's people, infrastructure, property and environment.

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